



TERMOELEMENT MED FLANGET DYKLOMME TW40

Serie TC10-F

TC10F-14369122

Type K -40-1200°C 250x12mm DN40 form 2F

- Følerelement type K, J, E, N eller T
- Måleområde fra -40 til 1200°C
- Option: ATEX-klassificering
- Udskiftelig måleindsats
- Svejst følerør med flange



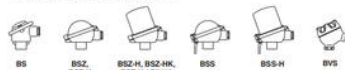
PRODUKTBESKRIVELSE

SPECIFIKATIONER

Indstikslængde	250 mm
Inside diameter	7 mm
IP-klasse	IP65
Material Sensor Body	Inococonel - 600
Materiale hus	Aluminium
Materiale medieberørte del	Rustfrit stål 316Ti
Neck length	0,065 m
Plug diameter	12 mm
Temperature resistance housing from	-40 °C
Temperature resistance housing to	80 °C
Temperaturområde fra	-40 °C
Temperaturområde til	1200 °C
Trykmodstand max	16 bar

Connection head

■ European designs per EN 50446 / DIN 43735



Model	Material	Cable entry thread size	Ingress protection (max.) ¹⁾	Cap	Surface	Connection to neck tube
BS	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Flat cap with 2 screws	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Spherical hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H (2x cable outlet)	Aluminum	2 x M20 x 1.5 or 2 x 1/4 NPT ²⁾	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H / DH10 ⁴⁾	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BSS	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with clamping lever	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BSS-H	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with clamping lever	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BVS	Stainless steel	M20 x 1.5 ²⁾	IP65	Precision-cast screw-on lid	Blank, electropolished	M24 x 1.5
BS2-K	Plastic	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BS2-HK	Plastic	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with cylinder head screw	Black	M24 x 1.5

Model	Explosion protection				
	without	Ex i (gas) Zone 0, 1, 2	Ex i (dust) Zone 20, 21, 22	Ex nA (gas) Zone 2	Ex nC (dust) Zone 22
BS	x	x	-	-	-
BS2	x	x	x	x	x
BS2-H	x	x	x	x	x
BS2-H (2x cable outlet)	x	x	x	x	x
BS2-H / DH10 ⁴⁾	x	x	-	-	-
BSS	x	x	-	-	-
BSS-H	x	x	-	-	-
BVS	x	x	-	-	-
BS2-K	x	x	-	-	-
BS2-HK	x	x	-	-	-

Protection tube designs in accordance with DIN 43772

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, form 2F DIN 43772	Stainless steel 1.4571	9 x 1 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm	6 mm	
		12 x 2.5 mm	6 mm with sleeve Ø 8 mm / 8 mm	
Tapered, form 3F DIN 43772	Stainless steel 1.4571	12 x 2.5 mm, tapered to 9 mm	6 mm	

Protection tube designs in line with DIN 43772, weld-on solid tip

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Tapered, weld-on solid tip, in line with DIN 43772, non-standard design	Stainless steel 1.4571	9 x 1 mm, tapered to 6 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm, tapered to 6 mm	6 mm	
		12 x 2.5 mm, tapered to 6 mm	6 mm	

Protection tube designs in line with DIN 43772, wetted parts: special material, gilder flange: stainless steel

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 2F DIN 43772, non-standard design	2.4360 (MonelK50) / stainless steel 2.4619 (Hastelloy C276) / stainless steel 2.4610 (Hastelloy C4) / stainless steel 3.7030 (Titan Grade 2) / stainless steel	13.7 x 2.2 mm	6 mm with sleeve Ø 8 mm / 8 mm	M24 x 1.5 (rotatable threaded connection, male nut)

Protection tube designs in line with DIN 43772, tantalum cover with tantalum flange disc, carrier protection tube: stainless steel

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 2F DIN 43772, non-standard design	Tantalum / stainless steel	11 x 2 mm, tantalum cover 12 x 0.4 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
Tapered, in line with form 3F DIN 43772, non-standard design	Tantalum / stainless steel	12 x 2.5 mm, tantalum cover 13 x 0.4 mm	6 mm	

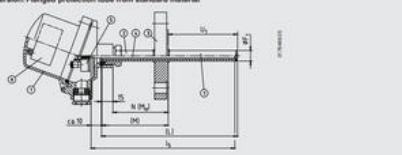
Cable entry



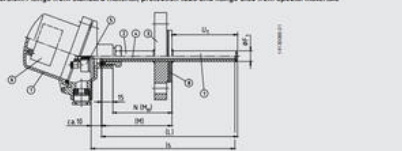
The pictures show examples of connection heads:

Cable entry	Cable entry thread size
Standard cable entry ¹⁾	M20 x 1.5 or 1/4 NPT
Plastic cable gland (cable Ø 6 ... 10 mm) ¹⁾	M20 x 1.5 or 1/4 NPT
Nickel-plated brass cable gland (cable Ø 6 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Stainless steel cable gland (cable Ø 7 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Plain threaded	M20 x 1.5 or 1/4 NPT
2 x M20 x 1.5 ²⁾	2 x M20 x 1.5
Junction box M12 x 1 (4-pin) ³⁾	M20 x 1.5
Sealing plugs for transport	M20 x 1.5 or 1/4 NPT

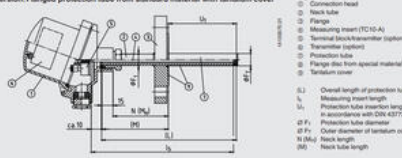
Version: Flanged protection tube from standard material



Version: Flange from standard material, protection tube and flange disc from special materials



Version: Flanged protection tube from standard material with tantalum cover



- Legend:
- 1) Connection head
 - 2) Neck tube
 - 3) Flange
 - 4) Measuring insert (TC10-A)
 - 5) Tantalum (black/transfer system)
 - 6) Transmitter (patent)
 - 7) Protection tube
 - 8) Flange disc from special material
 - 9) Tantalum cover
 - 10) Overall length of protection tube
 - 11) Measuring insert length
 - 12) Protection tube insertion length in accordance with DIN 43772
 - 13) Protection tube diameter
 - 14) Neck length
 - 15) Outer diameter of tantalum cover
 - 16) Neck tube length

Electrical connection



Connection head

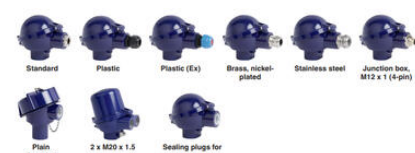
■ European designs per EN 50446 / DIN 43735



Model	Material	Cable entry thread size	Ingress protection (max.) ¹⁾	Cap	Surface	Connection to neck tube
BS	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Flat cap with 2 screws	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Spherical hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H (2x cable outlet)	Aluminum	2 x M20 x 1.5 or 2 x 1/4 NPT ²⁾	IP65, IP68	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BS2-H / DH10 ⁴⁾	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with cylinder head screw	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BSS	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with clamping lever	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BSS-H	Aluminum	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with clamping lever	Blue, lacquered ³⁾	M24 x 1.5, 1/4 NPT
BVS	Stainless steel	M20 x 1.5 ²⁾	IP65	Precision-cast screw-on lid	Blank, electropolished	M24 x 1.5
BS2-K	Plastic	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Spherical hinged cover with cylinder head screw	Black	M24 x 1.5
BS2-HK	Plastic	M20 x 1.5 or 1/4 NPT ²⁾	IP65	Raised hinged cover with cylinder head screw	Black	M24 x 1.5

Model	Explosion protection				
	without	Ex i (gas) Zone 0, 1, 2	Ex i (dust) Zone 20, 21, 22	Ex nA (gas) Zone 2	Ex nC (dust) Zone 22
BS	x	x	-	-	-
BS2	x	x	x	x	x
BS2-H	x	x	x	x	x
BS2-H (2x cable outlet)	x	x	-	-	-
BS2-H / DH10 ⁴⁾	x	x	-	-	-
BSS	x	x	-	-	-
BSS-H	x	x	-	-	-
BVS	x	x	-	-	-
BS2-K	x	x	-	-	-
BS2-HK	x	x	-	-	-

Cable entry



The pictures show examples of connection heads:

Cable entry	Cable entry thread size
Standard cable entry ¹⁾	M20 x 1.5 or 1/4 NPT
Plastic cable gland (cable Ø 6 ... 10 mm) ¹⁾	M20 x 1.5 or 1/4 NPT
Nickel-plated brass cable gland (cable Ø 6 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Stainless steel cable gland (cable Ø 7 ... 12 mm)	M20 x 1.5 or 1/4 NPT
Plain threaded	M20 x 1.5 or 1/4 NPT
2 x M20 x 1.5 ²⁾	2 x M20 x 1.5
Junction box M12 x 1 (4-pin) ³⁾	M20 x 1.5
Sealing plugs for transport	M20 x 1.5 or 1/4 NPT

Electrical connection



Protection tube designs in accordance with DIN 43772

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, form 2F DIN 43772	Stainless steel 1.4571	9 x 1 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm	6 mm	
		12 x 2.5 mm	6 mm with sleeve Ø 8 mm / 8 mm	
Tapered, form 3F DIN 43772	Stainless steel 1.4571	12 x 2.5 mm, tapered to 9 mm	6 mm	

Protection tube designs in line with DIN 43772, weld-on solid tip

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Tapered, weld-on solid tip, in line with DIN 43772, non-standard design	Stainless steel 1.4571	9 x 1 mm, tapered to 6 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
		11 x 2 mm, tapered to 6 mm	6 mm	
		12 x 2.5 mm, tapered to 6 mm	6 mm	

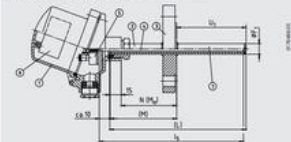
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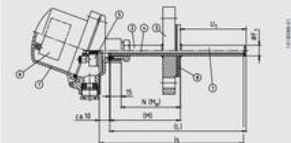
Protection tube designs in line with DIN 43772, tantalum cover with tantalum flange disc, carrier protection tube: stainless steel

Protection tube	Material	Protection tube Ø	Suitable for measuring insert Ø	Connection to head
Straight, in line with form 2F DIN 43772, non-standard design	Tantalum / stainless steel	11 x 2 mm, tantalum cover 12 x 0.4 mm	6 mm	M24 x 1.5 (rotatable threaded connection, male nut)
Tapered, in line with form 3F DIN 43772, non-standard design	Tantalum / stainless steel	12 x 2.5 mm, tantalum cover 13 x 0.4 mm	6 mm	

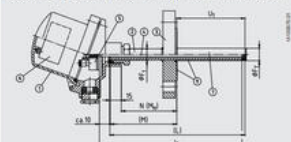
Version: Flanged protection tube from standard material



Version: Flange from standard material, protection tube and flange disc from special materials



Version: Flanged protection tube from standard material with tantalum cover



- Legend:
- 1 Connection head
 - 2 Neck tube
 - 3 Flange
 - 4 Measuring insert (TC10-A)
 - 5 Terminal block/transmitter (optional)
 - 6 Transmitter (optional)
 - 7 Protection tube
 - 8 Flange disc from special material
 - 9 Tantalum cover
- S Overall length of protection tube
L Measuring insert length
U1 Protection tube insertion length
U2 Protection tube insertion length
d F1 Outer diameter of tantalum cover
N Neck length
N (M) Neck length